(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 6 January 2005 (06.01.2005)

PCT

## (10) International Publication Number WO 2005/001865 A1

- (51) International Patent Classification7: H01H 13/70, A41D 1/00
- (21) International Application Number:

PCT/IB2004/051015

- (22) International Filing Date: 25 June 2004 (25.06.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/483,773

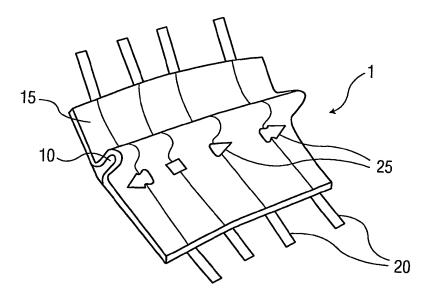
30 June 2003 (30.06.2003) US

- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS, N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MARMAROPOU-LOS, George [GR/US]; P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US). VU, Giang, T. [GB/US]; P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US). PUL-FORD, Katharine [GB/GB]; P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US).

- (74) Common Representative: KONINKLIJKE PHILIPS ELECTRONICS, N.V.; c/o WAXLER, Aaron, P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: A PRESSURE ACTIVATED INTERFACE



(57) Abstract: There is provided a flexible, lightweight high-performance pressure activated interface (1) that can cooperate with a variety of different textiles as well as with any of a variety of different electronic devices/systems without compromising characteristics of the different textiles. The interface (1) having a textile construction with one or more collapsible cavities (10). The collapsible cavities (10) having one or more conductive contact areas (30) associated with one or more leads (20) and situated such that at least two of the one or more conductive contact areas (30) can electrically communicate via a mechanical interaction. The at least two of the one or more conductive contact areas (30) being elevated relative to the one or more leads (20).

### 

## Declarations under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

- IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.